Working Definition of a Chemical Probe

The minimum properties displayed by a compound to be defined as a compound probe are:

1. Potency: <1 – 10uM; context dependent (varies with assay target & current state of the art; example: new compound provides similar potency but improved selectivity)

2. Solubility: sufficient solubility in relevant assay solvents.

3. Availability: accessible in amounts to allow advanced studies (15-20mgs)

4. SAR, mode of action, selectivity and toxicity are important compound information to have but not required.

5. Development of a new probe: must represent an improvement over the existing art. Supporting information required showing currently available probes, their properties and the new probe is clearly an improvement.